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ABSTRACT

This paper explicates and compares theories of composition that use heuristic or problem solving procedures in order to determine what can logically be expected from the application of a particular heuristic during the composing process. The heuristic models examined include E. P. J. Corbett's selection from the classical topics; R. Young, A. L. Becker, and K. L. Pike's tagmemic model; K. Burke's pentad; D. G. Rohman and A. O. Wlecke's prewriting procedures; and F. D'Angelo's conceptual model. For purposes of contrast, the paper also considers R. Zoellner's behavioral pedagogy, the newspaper journalist's probe, and the current-traditional composition course. An appendix contains capsule analyses, in chart form, of some of the major theories of composition on a number of salient points. (FL)

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# A SURVEY OF SOME RHETORICAL HEURISTICS AND THEIR IMPLICATIONS FOR THE TEACHING OF COMPOSITION

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# A SURVEY OF SOME RHETORICAL HEURISTICS AND THEIR IMPLICATIONS FOR THE TEACHING OF COMPOSITION

## Introduction

In this study, theories of composition that utilize heuristic or problem-solving procedures are explicated and compared in an effort to determine what can logically be expected from the application of a particular heuristic during the composing process. Lauer (1979) lists as "notable" among the textbooks offering heuristic models Corbett's selection from the classical topics, Young, Becker, and Pike's tagmemic model, Burke's pentad, Rohman and Wlecke's Pre-Writing procedures and D'Angelo's conceptual model. This study adds for purposes of contrast Zoellner's behavioral pedagogy, the newspaper journalist's probe, and the current-traditional course. Except for the last two, all of the models chosen for analysis present their heuristics not as useful gimmicks but as intrinsic parts of theories of composition, and all ought, therefore, to be examined and criticized as theories.

Theorizing, as Kuhn says, is controlled by paradigms--systems of beliefs, values, and methodologies shared by a scientific community--that are predicated on the presumption that the theorist "knows what the world is like" (1970, p. 5), and comp theorists tend not only to make assumptions about what the world is like but to presume that theories of composition ought to be direct reflections of the nature of the world. They tend, in fact, to answer the basic epistemological questions--what is the nature of knowledge? what is the source of knowledge? and what is the criterion of knowledge?--by relating them to a controlling metaphor which they posit as either representative of or a direct manifestation of the nature of the world.

For the rationalist, the source of knowledge is reason. Descartes, for example, maintained that all certain knowledge derives from two mental processes: intuition and deduction. The empiricists, whose epistemology has dominated twentieth-century science, have told us that the only things knowable or "true" are those which can

be verified: that which cannot be quantified and measured does not exist. On the other hand, composition pedagogy has grown from the romantic conception of truth as highly subjective: truth is that which is individually discovered or felt. The emergence of cognitive psychology has encouraged yet another view. Heuristic theories of invention postulate conceptual strategies that are inborn properties of the mind so that patterns of thought are manifested as patterns of discourse. They recognize as knowable not only the subjects and events of the world but the conceptual relationships characteristic of human thinking. These relationships determine the direction of human conceptual behavior by defining what is knowable.

All of the theories examined here make, or have made for them, explicit epistemological claims, and all posit heuristic procedures that presume a basis in an understanding of the processes of human thinking. Thus, in order to evaluate a heuristic, it is necessary first to understand the epistemological stance which gives rise to it.

Heuristic Procedures in Problem Solving

G. Polya, whose investigations into mathematical discovery have helped bring the "half-forgotten and half-discredited" term heuristic back into fashion, calls it "the study of the means and methods of problem solving" (1962, p. vi). Lauer, who explored heuristic procedures as they relate to "Invention in Contemporary Rhetoric" (1967), defines a heuristic as "a conscious and nonrigorous search model which explores a creative problem for seminal elements of a solution" (p. 4).

Richard Young distinguishes among rule-governed, heuristic, and trial-and-error procedures. A rule-governed procedure, he says, "specifies a finite series of steps which can be carried out in mechanical fashion without the use of intuition or special ability and, if applied properly, infallibly results in a correct answer." The procedures for solving addition and multiplication problems are familiar examples. Trial-and-error, as Young explains, "is characterized by seemingly random exploration of the problematic data," and progress toward a solution is "sporadic and

groping" (1968, pp. 547-48). Heuristics have characteristics of both rule-governed and trial-and-error procedures, and some overlap in both directions may be seen with individual heuristic procedures. Like a rule-governed procedure, a heuristic is systematic, but like trial-and-error, it requires intuition and the solution is never guaranteed. The consistent use of the scientific method is one sort of heuristic; the questions who? what? when? where? why? and how? utilized by a journalist in gathering information for a news story is another. A heuristic, as Young, Becker, and Pike (1970) describe it, is "a series of questions or operations that guides inquiry and increases the chances of discovering a workable solution" (p. 201).

Young and Becker, in an important article first appearing in the 1965 Harvard Educational Review, distinguish between two different kinds of heuristic:

> a taxonomy of the sorts of solutions that have been found in the past; and an epistemological heuristic, a method of inquiry based on assumptions about how we come to know something (Winterowd, 1975, pp. 131-32).

Polya offers a strictly taxonomic heuristic for approaching problems in mathematics: "What is the unknown? Is it possible to satisfy the condition? Draw a figure. . . . Can you use the result?" (1957, p. 30). All of the ad hoc plans that we come up with to solve daily problems as well as the learned procedures that we employ for dealing with recurrent problems would come under this category.

The seventeenth-century rationalists, stimulated by the emergence of the exact sciences, sought a strictly mechanical (or rule-governed) interconnection between Nature, the material universe, and human cognition. What they hoped to develop was a pure and true method (the ultimate epistemological heuristic) which would be applicable to all problems. They endeavored to deduce the fundamental governing principles of the universe and, starting there, by pure reason to bind together all Nature and all knowledge. Descartes's original formulation of a universal method involved reducing every problem to an algebraic equation and then solving the equation. Although he abandoned this notion as being unworkable, his

assertion in his Discourse on Method that we should strip every question of superfluous notions and reduce it to its simplest form grew from the original idea. The true method, Descartes believed, begins with immediate perceptions, those which are clear and distinct (Cogito, ergo sum), and by means of deduction arrives at universal propositions.

The empiricists pointed out that the difficulty with Descartes's epistemology is that it leaves out matters of fact. While pure deduction can provide logical consistency, his criterion of truth--clearness and distinctness--is patently inadequate. In the words of the American empiricist, Charles Peirce, clearness means "nothing more than familiarity with an idea" (1878, reprinted in Radar, 1956, pp. 99-100). Thus, the criterion of truth for the empiricist has become verifiability.

Although twentieth-century thought has had a decidedly empiricist predilection, Langer (1967) points out the cogency of the rationalist methodology when she reminds us that "the ancient science of mathematics" has continued its purely rationalistic methodology free from charges of mentalism or metaphysical associations (p. 18). She suggests that Kant's question, "What can I know?" is really dependent on a prior question, "What can I ask?" And, she says, Carnap provides an answer: "I can ask whatever language will express; I can know whatever experiment will answer" (p. 83).

Heuristic research in composition has benefited from this insight. In 1969 William F. Nelson summarized a presumption that underlies much of the theorizing in composition since the "revival of rhetoric" in the mid-1960s:

> It would seem that there is a finiteness characterizing man's ability to categorize which, largely transcending the barriers of time, space, and cultural influence, renders a kind of stability and predictability to the patterns of human conceptual behavior (p. 9).

Winterowd asserts that "it is impossible that formal relationships regarding any level of discourse can be infinite in number." The analogy with the argument that the grammar of the language must consist of a finite set of categories makes the

assertion "self-evident" to Winterowd (1973, p.706). And Young proposes as a criterion for evaluating heuristic models of discourse

> whether the psychological operations are fundamental, i.e., in some sense necessary to thought and inquiry, or whether they are arbitrary or designed for use only in particular specialized situations (1976, p. 28).

In the same way the rationalists posited a rule-governed world and tried to build a model of inquiry based on their understanding of how the universe operated, contemporary methodologists are seeking constants in conceptual behavior. The ideal heuristic would be based on rhetorical universals, a direct product of a necessary and sufficient epistemological position. As difficult as these universals are to verify, nonetheless, epistemological heuristics (or at least heuristics with an epistemological intent) are not uncommon. They are highly desirable methods of inquiry since they are meant to be not only systematic but exhaustive as well.

Invention, the means and methods of the discovery of knowledge (as information or truth), can in general be interpreted as an operational expression of the epistemology of a rhetorical theory, and the heuristic--whether it is an explicit set of terms or questions or whether it is implicit in the methodology, as Zoellner's talk-write strategy--is the tool or device used to carry out the operation. If the heuristic is the problem-solving strategy, the epistemology is the problem statement. The epistemology specifies what the theorist takes to be the "unknown."

## Current-Traditional Rhetoric as Theoretical Crisis

The most prominent assumptions influencing composition instruction today have their bases in practices established during the last quarter of the nineteenth century when the teaching of composition grew from and then quickly replaced the teaching of formal rhetoric. Until mid-century, when college classes in America started to become unmanageably large, the prevailing pedagogical technique had been recitation, a practice consistent with the dominant educational theory of mental discipline or "faculty psychology." Under this philosophy, according to

Applebee, "the educational value of a subject was held to stem from its logical principles" (1974, p. 253). The mind was regarded as consisting of a number of discrete faculties--the Will, the Judgment, the Memory, et cetera--which, like muscles, needed to be exercised. The function of education was to develop and strengthen the separate faculties, and formal rhetoric, consisting of a complex taxonomy of abstract principles in the eighteenth-century tradition, was well adapted for exercising the faculties of memory and reason. Kitzhaber summarizes Blair's influential 1784 discussion of style:

> Sublimity of style, for instance, depended on simplicity, conciseness and strength. Style itself had to have perspicuity in words and sentences. Perspicuity in words required purity, propriety and precision; and in sentences, clearness and precision, unity, strength, and harmony. The ancients, Blair said, had divided kinds of style into plain, median, and high, but he found this an oversimplification. Hence he offered the diffuse and concise styles, the nervous and feeble, the simple, the affected, the elegant, the vehement, the dry, the plain, the neat, etc. (1953, p. 82).

The recitations of these qualities were to serve two distinct functions: to develop the faculties and to ensure the inculcation of a store of principles that could be drawn on as required in later professional life. S. M. Halloran characterizes the master of classical rhetoric as "the man who had interiorized all that was best in his culture and applied this knowledge in public forums, influencing his fellow citizens to think and act in accord with their common cultural heritage" (1975, p. 621). Thus, the ends of rhetoric coincided with the ends of education.

Unfortunately, the burgeoning new industrial society in the United States was one without a common cultural heritage, and the schools were charged, in Piche's words, "with responsibility for establishing a formal standard of usage, a standard which might provide a general social model as well as a badge of class and ethnicity for its users" (1977, p. 20). The first important requirement in composition in the American college system was the 1873-74 Harvard admissions requirement, and it was instituted in an unabashed attempt to force the lower schools to teach what were regarded as prerequisite linguistic skills. Reed and Kellogg introduced the

the sentence diagram in 1878, and along with the positive effect parsing sentences was expected to have on the improvement of linguistic skills, they maintained that through the study of sentences one could discover the laws of discourse--unity, continuity, proportion, order, in other words, the abstractions of formal rhetoric. And, "as a means of discipline," they said, "nothing can compare with training in the logical analysis of the sentence" (excerpted in Bornstein, 1976, p. 44).

The association of composition instruction with the faculties was further reinforced by Alexander Bain's associating the Forms of Discourse with the faculties of the mind. The object of Description, Narration, and Exposition, according to Bain, was "to inform the Understanding," the object of Persuasion "to influence the Will," and the object of Poetry "to excite pleasurable Feelings" (1866, p. 19).

Rhetoric in the nineteenth century had provided the link between the faculties of the mind (internal reality) and the empirically verifiable nature of the world (external reality), but after publication of Darwin's Origin of Species, man's supremacy by virtue of his rationality had been called into question. As Donald Johnson (1972) puts it:

> Psychology, pushed by the doctrine of evolution, moved in with biological and social sciences, relinquishing the study of idealized thought for the study of actual behavior and treating both rational and irrational thought as natural human activities open to empirical investigation (p. 229).

This view was to begin with, however, confounded by the romantic preoccupation with genius. The nineteenth-century romantics (and even the most meticulous and "scientific" of the philologists were, after all, romantics) would necessarily reject the "barren formulas" of rhetorical invention because they defined the artist as an inspired genius. As Lauer observes, the romantics "deemed discovery a mysterious process, operable only in a few" (1967, p. 11). The only way of getting at a purely internal process appeared to be through introspection, and since the technique was defined as "unscientific" and "mentalistic" at the beginning of the twentieth century, the scientific investigation of thinking and, consequently, composing was

stymied for some time. With the mind declared inaccessible, rhetoric appeared to have no essential function. The vital link between speaker, hearer, and truth had been dissolved.

As a discipline, rhetoric had a limited number of options at this juncture. One option was to go along with the prevailing empiricist paradigm and investigate rhetoric as persuasion: the human organism exposed to rhetorical stimuli does in fact respond in predictable and measurable ways. When the Speech Association of America made the decision to separate from the National Council of Teachers of English in 1914, in essence, it exercised that option. When rhetoric was "revived" in 1964 in English, it was celebrating a productive Golden Anniversary in Speech. Another option for composition/rhetoric would have been to remain stubbornly and uncompromisingly mentalistic. What characterizes the so-called current-traditional paradigm, however, is that none of the epistemologically viable options was exercised. Berlin and Inkster postulate that current-traditional rhetoric reduced radically "the perceived importance of the writer" because of what they regard as a paradigmatic definition of reality, "a world governed by rationality," as external to the mind of the composer. They describe the vitalist's concern with creative genius as a "whisper":

> The current-traditionalist's conception of the composing process as mysterious and unteachable is, however, in the main implicit. When composing is dealt with explicitly,it reflects the reduction of knowing to an objective mechanical activity (1980, pp. 3-4).

Traditional pedagogy has concentrated on the craft of writing to the exclusion of invention precisely because of that whisper. The conception of the artist as a "Great Man" (hardly ever a "Great Woman") separates the composing of unskilled students from that of true artists and justifies in the process the mechanical sort of training that students receive.

Young argues that since the beginning of the twentieth century, "the teaching and researching of composition" have been dominated by a new paradigm (1978, p. 29).

The epistemological shift that can be dated conveniently from the turn of the century did not, however, incorporate rhetoric or model building as legitimate means of inquiry in the new paradigm; rather the techniques of rhetoric were seen as antithetical to science as defined by the methodology of empiricism. Abiding at the theoretical core of current-traditional composition pedagogy there is an unresolved epistemological conflict.

"Pre-Writing": Journal, Meditation, and Analogy

The first important contribution to the revival of rhetorical theory in composition heralded in the mid-1960s was an experimental research project conducted at Michigan State University by D. Gordon Rohman and Albert O. Wlecke. So completely dormant was the art of Invention at this time that their techniques could be referred to by the generic lable "pre-writing" without confusion.

From a theoretical point of view, the Pre-Writing project was an auspicious beginning for the revival of rhetoric in that it articulated major aspects of the widely held romantic philosophy of composing and at the same time challenged a common assumption of that philosophy--that writers either do not or cannot exercise control over their rational processes. Rohman and Wlecke expanded and modified the romantic philosophy, synthesizing insights from religious existentialism and cognitive psychology, and they provided an epistemologically consistent methodology.

They saw the schism between what writers do and what students are asked to do as the biggest problem in composition pedagogy. What the romantics describe as the domain of the artist--feelings of incongruity and despair followed by creative insight--the existentialist describes as the human condition. The purpose behind discourse for Rohman and Wlecke is not the articulation of the culture but of the individual who can achieve "greater self-actualization through better thinking." They describe their approach to composition as being based on the existential premise that "truth exists for the individual only as he himself produces it in action."

The basic reason to teach students to write is so that they may "live more abundantly." Thus, the "practical needs of communication" remain secondary to the existential urge for self-affirmation. They take exception to the view of composition teaching that encourages the proliferation of cultural "thought-cliches" and restricts writing to a "'tool' course" (1964, p. 23).

Rohman and Wlecke did not, they say, "presume to advance a new theory of creativity" (p. 15). They utilize the organic philosophy of romanticism as it is articulated by Meyer Abrams (1958) using the common plant analogy for the writing process. Like a growing plant, they suggest, the writer assimilates, not nitrogen and sunlight, but "'events' from the world" and "converts" them into "'experience' in a person." A writer "not only suffers the impact of external events" but experiences them by putting them into words in the mind. "The writer gropes for those words which will cause this transformation" of event into concept. This type of "thinking-as-discovery" is the first and most vital in the thinking-writing process, and it is the stage most often left to chance in the traditional composition class. They sought ways to get the students "to imitate the creative principle of discovery itself," to introduce them to "the dynamics of creative discovery." They recognize that "thinking-as-discovery" is not a sufficient condition for producing good writing, but without the operation of this fundamental creative principle, they maintain, "good writing is impossible" (p. 17).

The techniques employed by Rohman and Wlecke are epistemologically consistent with the philosophy expressed. The journal stimulates a sense of self, guided by questions asking for sensory details and descriptions of place (the loosest form of taxonomic heuristic); the meditation presumes the meditator is self-aware and demands the juxtaposition of an abstract concept with a concrete vivid setting, a limited, concrete analogy; the third major approach, the analogy, moves the students from the concrete analogy of place to the analogical inference as a vehicle for looking at the world of events from a certain perspective.

For Rohman and Wlecke, the analogy is neither the ultimate epistemological heuristic nor merely an accidental rhetorical device. Analogy refers, they say, "to that principle of human knowing whereby we are enabled to know anything in our present experience because we relate it to something already known (categorized) in our past" (pp. 32-33). They suggest, in other words, that analogy is one of the constants of human conceptual behavior. It was their intention to devise a course that would allow students to imitate the dynamics of the creative experience in a situation with a high probability of generating original insights. It was not their intention to present a universal heuristic or a complete pedagogy of composition.

## The Classical Topics

The most ancient heuristic widely known in composition pedagogy and among the most complex is the classical system of topics derived from Aristotle's Rhetoric. What Young describes as "the most thorough-going and uncompromising" (1976, p. 10) contemporary presentation of the classical system is that done by Edward P. J. Corbett, Classical Rhetoric for the Modern Student (1965, second edition 1971).

The ancient rhetoricians recognized three main kinds of public discourse: the deliberative, the forensic, and the ceremonial. Deliberative discourse covered the arguments regarding public affairs. Corbett gives numerous examples--"whether to go to war, whether to levy a tax, whether to enter into an alliance with a foreign power, whether to build a bridge or a reservoir or a temple" (p. 4). Forensic or judicial oratory was that in which a speaker tried to defend or condemn someone's actions. Ceremonial discourse was concerned less with persuasion than with inspiring an audience.

In the process of invention, Aristotle recognized three types of appeal that a speaker could draw upon: the rational, the emotional, and the ethical. The topics were the method employed by the rhetor to discover arguments to be used for each of the three types of appeal. Aristotle identified the special topics as those

relating to particular kinds of discourse and the common topics as those applicable to discourse in general.

Deliberative discourse is concerned with two problems: what we should choose and what we should avoid. The special topics of deliberative discourse provide two criteria for making these judgments: that which is good or worthy in and of itself and that which is advantageous or expedient. Shall we go to war? First we must determine whether the end to be attained is good and then we must determine whether it will serve our best interests or not.

Forensic or judicial discourse is concerned ultimately with justice and injustice, but before the special topics can be developed three questions must be addressed: whether a thing is, what it is, and what kind of thing it is. Aristotle recognized seven causes of human action: compulsion, nature, chance, habit, reason, passion, and desire.

The special topics of ceremonial discourse were honor and dishonor or praise and blame. The virtues and vices--courage and cowardice; temperance and incontinence; justice and injustice (in the sense of respecting natural and legal rights of others); liberality or illiberality; magnanimity or meanness of spirit; prudence or rashness; gentleness or brutality--were not meant as an exhaustive list, but they include those that "produce benefits for others" since those virtues are the ones most likely to "contribute to the esteem in which a man is held" (p. 154).

Modern adaptors have tended to simplify and focus on a limited segment of the total system, and the segment that has been most productive in composition pedagogy has been the common topics, many of which appear to correspond with conceptual constants. Corbett presents them in outline form:

Definition
- A. Genus
- B. Division

Comparison
- A. Similarity
- B. Difference
- C. Degree

Relationship
- A. Cause and Effect
- B. Antecedent and Consequence
- C. Contraries
- D. Contradictions

Circumstances
- A. Possible and Impossible
- B. Past Fact and Future Fact

Testimony
- A. Authority
- B. Testimonial
- C. Statistics
- D. Maxims
- E. Law
- F. Precedents (Examples) (p. 110)

To develop a subject, the rhetor drew it as a matter of course through the topics. The ancients, the Romans, the medieval clerics, even the neo-Classical rhetoricians believed that by testing any subject against each of the topoi, one could discover all available arguments in a given case. The seventeenth-century rationalists called both Aristotle's psychology and his analysis of the types of discourse into question, and now the topics are usually treated as a good, though not ideal, taxonomy for invention.

Carl Holmberg illustrates the use of the common topics not to generate arguments but to gather information about the decimation of the whale population. Under definition, for example, he asks:

> Genus . . . what kind of whale am I talking about?
> Division . . . how to divide my time on this paper and other work? (1978, p.11).

Corbett explains that an argument from genus "employs a universally accepted convention for which the speaker does not feel that description, analysis, or 'proof' is required. . ."(p. 159). To use Holmberg's example, one might discover as arguments from genus that whales are "endangered species" or "living creatures" or because of their use of language "sentient beings," all of which would make them uniquely worthy of concern.

Whereas treating the topoi as an information gathering device, as Holmberg does, might lead a student into reading about different types of whales, making the

epistemological assumption that by drawing the subject through the topics one will necessarily discover the arguments available to use in supporting the position taken results, though not infallibly, in the discovery of such arguments. Some of the arguments may be rejected--sanctity of life may not be very persuasive to tuna fishers; the sentient being argument may be too "far out" for others--but the purpose of the heuristic has been fulfilled.

Aristotle argues that because rhetoric and the dialectic can "indifferently prove opposite statements," the arguer has the opportunity to see all sides of a case, and "what is true and preferable is by nature always easier to prove, and more convincing" (Aristotle, p. 6).

A Behavioral Pedagogy for Composition

If Rohman and Wlecke can be said to have struck a responsive chord by articulating an essentially romantic conception of the composing process widely held in the profession, Robert Zoellner in a 1969 monograph, "Talk-Write: A Behavioral Pedagogy for Composition," created dissonance. The immediate reaction to his attempt to explain the process of composing (scribal fluency) with behavioral terminology was intensely negative. Commenting in 1969 Theodore R. Sarbin (a behavioral modification psychotherapist whom Zoellner draws on extensively) noted that his "thesis must be regarded as revolutionary" in Kuhn's terms (p. 645). Young maintains that "Not the criticisms, but the violence of the criticisms" indicate that he had gone beyond the traditional composition paradigm (1978, p. 30).

Zoellner called into question the instrumental metaphor that "the written word is thought on paper," asserting that such a conception was "outmoded, grossly simplistic, and inhibitory of genuine progress in teaching students on any level to write effectively." He attacked the assumption that bad writing is bad thinking by asserting that in his experience students who think "with rapidity and precision" often write poorly, but when confronted in an office interview with the question, "'What in the world were you trying to say?' . . . They open their mouths, and

they say the thing they were unable to write." When this happens, Zoellner says, "the problem lies not in the realm of thought, but elsewhere" (1969, pp. 269-73).

Elsewhere is the realm of behavior. The solution he proposes is, therefore, not a cognitive map such as the classical topics nor an inspirational stimulus like analogy; it is rather built on the model of behavior-modification psychotherapy. His critical assumption is that the desired behavior is a part of the naive behavioral repertory of the average student. An instructor working with the "freely emitted behavior" can gradually shape the "scribal performance" through intermediate specification of response." Traditional pedagogy, he felt, was deficient in that it specified "bullseye" performance as the only acceptable response in a composing situation, with the terminal specification provided by professional essays and the "correction chart" at the end of a textbook. Zoellner proposed a behavioral bridge, talk, between the student's scribal performance and "the invisible archetype at which we wish him to aim" (1969, p. 284). The assumptions that he makes are that students have greater skill in the vocal than in the scribal modality and that they can exploit that skill to transfer from one mode to another, gradually integrating the two.

The heuristic device he proposes in the "Talk-Write" monograph appears to be very close to trial-and-error problem solving. The talk-write pupil would begin by writing down anything and then would gradually refine and expand upon the initial statement in a vocal-to-scribal dialogue.

The irony in the villification of the behaviorism of Zoellner is the extent to which his pedagogical stance, particularly as it is articulated in the text he co-authored with Clarence A. Brown (1968), reflects the traditional nineteenth-century model of the composing process. The text begins with the notion articulated by Reed and Kellogg that through the study of sentences one can discover the general laws of discourse. The grammatical relationships found in basic sentence patterns are essentially the same as those to be found in the "patterns of organization" and

the "larger patterns" of exposition, description, argument, and narration: "Growth in skill and discrimination in the use of sentence patterns is the means to increasing success in the conversion of ideas to written expression" (1968, p. viii). Stated in behavioral terms, what this implies is a gradual shaping of behavior from the naive repertory of the student. What the traditional pedagogy has failed to do is to show the nature of the connection between sentence-level relationships and the larger aspects of discourse. Zoellner aims to provide "a solid bridge from sentence to paragraph" by means of the principles of rhetorical unity. Unity, coherence, development, and emphasis--the simplified rhetorical abstractions--they call "skills" to be developed. The principles derived from studying grammatical relationships can be summarized as modification, coordination, and subordination. Invention is the process of limiting and sharpening (modifying) observations through details, attributes, and comparisons; coordination is involved not only with things which are similar but with things which are antithetical. The relationships involved in subordination are those of time, place, manner, result, cause, condition, and concession. In non-behavioral terms, these are "constants" of human conceptual behavior in that they describe types of relationships humans can apprehend and convey. They are in Zoellner's view the naive repertory of the student. The student does not "learn" the relationships (an interior activity) but "emphasizes" them more effectively in produced discourse (an observable act) (1968, pp. 26-27).

Rohman and Wlecke maintain that nothing exists in the intellect which does not first exist in the senses. Brown and Zoellner maintain that ideas exist because of the nature of the world. Adherence to truth for the rhetorical behaviorists consists in accurately representing reality, which is constant and unchanging. Language, however, is "our shorthand for reality," and people who are "intellectually lazy or frightened begin to use labels to mask, hide, obscure, or oversimplify reality." The more concrete the language, the greater the "rhetorical

strength" (1968, p. 301). The process of rhetorical development is the act of exploiting and articulating relationships inherent in a topic. Since the basic assumption is that the possibilities of invention are inherent in the topic under discussion, the primary rhetorical strategy is description throughout the text. Bill Jones, their indefatigable student-hero, describes his uncle, his father, his roommate, the typical American coed, his home state, his home town, an approaching storm, and a winter storm. For narration he describes "a recent experience" and the day he learned to ski. For exposition he describes an internal combustion engine and the Christian vision of life.

Jones has his greatest difficulty with argumentative writing where simple description is least productive as a starting point. In argument, the writer must consider not only the external factors but internal ones as well. To understand an argument completely, it would be necessary to have access to all of the details of the world, but "human experience is by its very nature particular, not universal"; being egocentric, we overgeneralize: The ad hominem fallacy arises from "the self-protective and combative elements of the normal human ego." Oversimplification occurs because of "the human desire to present a clear-cut and unequivocal solution to a problem of vexing complexity." Faulty causality is "a normal human attempt to simplify the complexities of reality" (1968, p. 541). Invention is still inherent in the nature of the world, but in argument the "world" consists of two things: the topic and the fallible human audience. The best argument, they imply, is the one with the most complete compilation of "evidence," assuming that arguments themselves are inherent in the subject matter.

## The Dramatistic Method of Kenneth Burke

The work of Kenneth Burke has captured the imagination of many writers in composition during the last decade. In the enthusiasm to make applications from theory to pedagogy as rapidly as possible, however, it is all too easy to misinterpret,

misconstrue, and misapply pieces from his sometimes esoteric whole. Burke's adaptors fall into two general classes: those who focus on the semantic resources implicit in terminologies and those who focus on the pentad--his five key terms of dramatism: act, agent, agency, scene, purpose. While the semanticists tend to be on surer epistemological ground in their interpretations, the pentad has received much greater currency. Divorced from its context, it is almost always reduced to an information retrieval probe, not just comparable to the heuristic commonly employed by the newspaper journalist but identical with it. To say that the pentad can be used to retrieve information is this manner is certainly true, but it is also trivial.

To understand Burke's epistemology, it is useful to understand that he began as a behaviorist, strongly influenced by the General Semantics of Korzybski. Attempting to explain the abstract language behavior of a highly developed organism in scientific terms, the Semanticists established that the rudiments of generalization, specification, classification, and abstraction were available to nonlinguistic organisms. Following this lead, I. A. Richards maintained that all thinking was essentially sorting behavior, and he fit all responses ultimately into two categories: acceptance and rejection (1965, p. 30). Similarly, Burke reasons that it is the capacity to conceive of negatives that is uniquely human, and it is in the negative that he places the origin of language. First, "gruntlike sounds" were used for calling attention to something, but the breakthrough into symbolic activity, he speculates, occurred when these sounds took on "admonitory connotations." He does not mean to imply that human language was derived by what he calls a "graded-series" from "behaviorist pre-language." Rather, he says, there is a "'qualitative leap' between the motives of pre-language and those of language" (1966, pp. 421-24). It is failing to recognize the qualitative leap from animal to linguistic behavior or reading it as a metaphor that results in misinterpreting Burke's epistemological position. He posits two motives for human behavior:

animality (explainable by behaviorism) and symbolicity.

He coins a new word, logology, for the new concept; it is, he says, "a purely empirical study of symbolic action." The General Semanticists discussed how the nature of the terms chosen to explain or describe a phenomenon could affect the nature of the explanation or description; however, Burke goes further:

> many of the observations are but implications of the particular terminology in terms of which the observations are made. In brief, much that we take as observations about "reality" may be but the spinning out of possibilities implicit in our particular choice of terms (1966, pp. 46-47).

The "principle of perfection" is described as a kind of "terministic compulsion" which is implicit in the nature of symbol systems that drives the symbol user "to carry out the implications of one's terminology" (1966, p. 16). Questions of truth and falsity do not apply; as words all terminologies are equally true. Burke avoids solipsism by emphasizing the verifiability of symbolism itself.

The theologian's epistemology is summarized by the expression, "Believe, that you may understand." Applied to the problems of terministic interference in reality, the logological counterpart of "'Believe,'" Burke says, "would be Pick some particular nomenclature, some one terministic screen. And for 'That you may understand,' the counterpart would be: 'That you may proceed to track down the kinds of observations implicit in the terminology you have chosen, whether your choice was deliberate or spontaneous" (1966, p. 47). For Zoellner, the avowed behaviorist, invention is description; for Burke, the empirical symbolicist, invention is speculative etymology.

The goal of a Burkean rhetoric is often, and rightly, recognized to be "identification." Identification is not a matter of displaying an attitude of open-mindedness and acceptance to one's opponent in a debate, although Burke would not disagree with the desirability, even the necessity, of such behavior; identification is exploring the terminological limits of opposing positions and searching out the term at a higher level of abstraction that will allow opposing views to be

reconciled. As Burke says:

> One confronts contradictions. Insofar as they are resolvable contradictions he acts to resolve them. Insofar as they are not resolvable, he symbolically erects a "higher synthesis," in poetic and conceptual imagery, that helps him to "accept" them.

Burke proposes an alternative to the classical training of debators which would require them to write two debates, "upholding first one position and then the other." As a third assignment, he would have students write a paper "designed to be a formal transcending of the whole issue, by analyzing the sheerly verbal maneuvers" (as cited by Fillion, 1969, p. 196).

To begin with the pentad as an epistemological heuristic of invention is to fail to perceive that the terms are "basic forms of thought" to a symbol-using animal who is impelled in one direction by the "principle of perfection" and pulled back "from the abyss" by the power of the negative. The concept of invention is itself an interpolation into Burke's theory, for as he points out in discussing Irmscher's treatment of the pentad, ". . . Aristotle's list is telling the writer what to say, but the pentad in effect is telling the writer what to ask." The understanding which Burke seeks is that of a critic: "My job . . . was to help a critic perceive what was going on in a text that was already written. . . . My job was to ask of the work explicit questions to which its structure had already implicitly supplied the answers" (1978, p. 332). Burke identifies the poetic motive as "the sheer exercise of 'symbolicity'" (1966, p. 29). The writer, he says, does not search for something to say, but begins when "several things" have "clicked into a relationship." Once a relationship is perceived, the terministic compulsion--the principle of perfection--drives the poet forward when "he sees, or vaguely feels, a way to unfold, to make progressively manifest, the set of timeless relationships that prevails among them" (1966, p. 35).

For Rohman and Wlecke, the goal of the writing course was less the written product than achieving "authenticity," that personal sense of what is real and

true. By contrast, Burke is willing to allow his exemplary poet/critic, Edgar Allan Poe, to be described as a psychologically unhealthy liar. (LSM p. )

Both Burke and the romantics recognize insight as an operant condition in composing, but for the romantic it is a constructive force; for the existential romantic, it is a way of transcending the tyranny of symbols. For Burke, insight is the beginning of an understanding of the implications, "the timeless relationships," inherent in a terminology. The goal of understanding is not self-actualization but the "perfection" of a terminology.

The poetic motive is to achieve perfection by producing "a work in which the parts are in perfect relationship to one another." This is the positive for Burke. Add the negative, irony, and we derive the motive of language in general: "Where the poetic motives thus ties in with perfection in its ironically manifold manifestations, it lies at the very roots of symbolicity" (1966, p. 39).

Tagmemic Invention

The conviction expressed by Reed and Kellogg in 1878 and reiterated by Zoellner and Brown in 1968 that a connection between grammatical structures and the larger rhetorical structures must exist surfaces again in the tagmemic theory popularized in the 1970 text Rhetoric: Discovery and Change by Young, Becker, and Pike. Pike stated in 1964 that "composition is but a specialized variety of the use of language, and that principles about language in general should therefore be exploitable for training in the more mechanical phases of the composition arts" (p. 2).

Structuralism, of which tagmemics is a part, was an outgrowth, not precisely of behaviorism, but of the empirical paradigm that rejected as mentalism any discussion of properties of the mind that could not be measured. As linguistics developed during the nineteenth century, there was increased interest in treating linguistic questions as scientific problems. And, as the nature of science changed, linguistics was inclined to absorb the changes as well. Pike is continuing this

tradition when he proposes another methodological revision consistent with changes taking place in physics.

Following the seventeenth-century scientific revolution, science was equated with predictability. Science, in fact, became the searching out and explaining of the determining causes of seemingly inexplicable phenomena. There was a growing awareness by the middle of the twentieth century, however, that the Newtonian world view and the strict determinism it implies are inadequate to explain the language behavior of creative human beings. It was the absolute necessity of recognizing creativity as a component of the composing process which had kept composition theory at odds with the prevailing scientific paradigm throughout the first half of the century. Thus, the theoretical model being used by the tagmemicists added an important epistemological advantage for composition theorists: following the model implied by quantum mechanics, it incorporated the creative (unpredictable or probablistic) nature of language use.

The prototype of the statement of the problem is the Heisenberg Indeterminancy Principle. What Heisenberg noted was that the position and momentum of an elementary particle could not be measured simultaneously because the introduction of light to measure position caused an increase in the momentum of the particle being observed, and attempting to measure momentum caused a change in position of the particle so that the best measurement could be only a probablistic one. The well ordered system of Newtonian physics assumed a natural uniformity such that if we knew the initial position and momentum of a particle at a given time, then we could predict its subsequent position and momentum (Bohm, 1957, pp. 81-89). I. A. Richards articulates the essential cosmological difference in rhetorical terms when he says that the eighteenth-century Usage Doctrine "takes the sense of an author's words to be things we know before we read him, fixed factors with which he has to build up the meaning of his sentences as a mosaic is put together with discrete independent tesserae." Richards recognizes this as an

oversimplification. "A word or phrase," he says, "when isolated momentarily from its controlling neighbors is free to develop irrelevant senses which may then beguile half the words to follow it." The only way to get at the true sense is by looking at "the interplay of interpretive possibilities of the whole utterance" (1965, p. 55).

This tentativeness does not mean that knowledge is inaccessible, however. It means first, as Odell says, "sane, presumably reasonable people can view things quite differently" (1973, p. 40). Second, it means that to explore a problem as completely as possible, one's focus on the problematic data must shift during the process of inquiry. The trimodal (particle/wave/field) perspective is designed to ensure that shifting focus. The tagmemicists consider a linguistic unit to be well defined when the description includes its contrastive features, range of variation, and distribution in sequence and ordered classes. A language system is described as "a hierarchical structure composed of complete but interrelated set of subsystems." These subsystems are subject to grammatical constraints (conventions) that make communication possible. (Young, Becker, and Pike, 1970, pp. 294, 302). To extend tagmemics beyond the level of the sentence, they needed to identify the "conventional forms" binding together larger forms of discourse.

Rohman and Wlecke had also recognized the significance of creativity and had suggested conceiving of the composing "problem" as a puzzle form, but Festinger's (1957) concept of dissonance as the defining characteristic of when a problem in need of solution exists is interpreted differently by the two teams. For the romantic-existentialists, dissonance is the "point of urgency" at which the writer becomes personally involved in some experience with the external world. For the tagmemicists, "Problems arise when one becomes aware of inconsistencies in his own image of the world." In tagmemics, dissonance is the tension or "uneasiness" that the composer experiences, and it may arise from a number of causes:

> a paradoxical 'fact' that doesn't make sense, a situation that is incompatible with a person's values, an apparent opposition of two respected authorities on an important issue, the seeming inadequacy of a strongly held theory, a clash of two sets of values to which a person is deeply committed (1970, pp. 71-73).

They define the process of inquiry as the movement from the feeling of dissonance to an adequate solution of the problem, and they base the first part of their course on a re-creation of the process of inquiry--from preparation and incubation through illumination to verification. While Aristotle suggested that there were only two parts to every discourse--the statement of the case and the proof--the tagmemicists reduce discourse to stating the problem and solving it. Thus, there are really only two ways a composer can err: either in conceptualizing the problem or in developing a solution to the problem (p. 324). The metaphor of indeterminism is further articulated in Rogerian argument which has as its goal: "1) to convey to the reader that he is understood, 2) to delineate the area within which he believes the reader's position to be valid, and 3) to induce him to believe that he and the reader share similar moral qualities . . . and aspirations. . ."(p. 275).

There is a discomforting disparity between the substance of the chapters and the writing tasks the students are asked to perform throughout the text. In general the writing assignments are too closely bound to the traditional composition course to be a true illustration of the possibilities of the rhetoric.

## A Conceptual Theory of Rhetoric

Frank D'Angelo's 1975 book, A Conceptual Theory of Rhetoric, is an attempt to provide a major synthesis of rhetorical theory as it applies to composition instruction. In a 1976 article, "The Search for Intelligible Structure in the Teaching of Composition," he states the goal of his rhetoric most clearly: "If there exists a simple order in the universe, then clearly the universe of discourse must reflect that order" (p. 147). D'Angelo believes the structure underlying the universe to

be a striving toward a goal, which for him implies evidence of intelligence. Whereas behaviorism rejected a teleological (purposeful) explanation for all action, D'Angelo is proposing ultimately that a teleological force underlies not only all human behavior, but all action in the physical universe and the forms of discourse as well. He fuses the romantic concept of organicity, the linguistic concept of structure extending from phoneme to syntax to paragraph to all discourse, and the religious concept that design implies intelligence to produce a theory that has as its informing metaphor a universe that is at once organic and holistic.

Unfortunately for those who would take his work seriously, D'Angelo appears to mean this quite literally. He believes that "we are in the midst of a revolution of consciousness . . . the birth of superconsciousness in which the rational and intuitive elements in the universe are harmonized into one grand design" (1975, p. vii). He uses the often refuted "Argument from Design" to "prove" the existence of God as his primary example in his discussion of "Persuasion as Aim" in the second edition of his composition textbook (1980, pp. 302-05).

We cannot demand of a model that its proof as a theory be its empirical verifiability; we can demand that it be internally consistent, or epistemologically sound, and we can demand that the theory handle problematic data within the system in a more complete and satisfactory manner than competing theories. The behaviorists rejected investigation of mental processes in explaining human behavior not only because they were empirically unverifiable but also because they felt the problematic data--human and animal behavior--could be explained without the concept. Because mentalism was often associated with unscientific mysticism, researchers should not be misled into thinking that the necessary re-examination of mental processes is an invitation to mysticism. The notion of an "intelligence" pervading the universe is not necessary to a conceptual theory of rhetoric, and such a concept complicates rather than simplifies the theory because when that intelligence is associated with God, as it inevitably is, in modern American classrooms it takes

on the additional characteristics of omnipotence and benevolence. While it might be possible for D'Angelo to argue for a bumbling, idiot God who hasn't the power or a malevolent God who hasn't the will to prevent evil, AS A MODEL the hypothesis that an intelligence consubstantial with the Christian \concept of God underlies and is the teleological explanation for human behavior must be rejected. The problematic data the theory cannot explain away is the evil in the world. Evil does exist.

Rejecting the argument from design is not the same thing as arguing that human intelligence is not structured. In fact, as David Jones suggests, there is evidence that there exists an "essential continuity of natural thought processes and formal rhetorical structures." With considerably more epistemological acumen than is customarily brought to bear on composition theory, Jones relates D'Angelo's discussion of "innate structural patterns" to Piaget's efforts to establish the biological origins of "classification and division, comparison and contrast, enumeration, etc." Piaget refers to these as "structures" which result from "highly complex developmental processes." (Jones, 1977, pp. 333, 336). This is an important distinction: if the structures develop through experience, then they are variable; psycholinguists, on the other hand, have been seeking evidence of "constants" of human conceptual behavior that are invariant characteristics.

D'Angelo is attempting to reconcile the developmental and universal nature of conceptual structures by suggesting that the structures are developing (growing in an organic sense) toward a preordained goal (intelligible structure). The goal of rhetoric becomes for him not a search for truth but a search for structure. He discusses paradigmatic analysis as discovering the underlying organizational patterns that he believes to be inherent in all discourse. The heuristic he constructs resembles nothing so much as the patterns of organization of traditional composition as his "logical topics." He incorporates "nonlogical topics" in his theory

but does not develop them in his text. If he wants to use "the argument from design" as his metaphorical world view, then--as the theist must account for evil and disharmony in a perfectly designed universe--he must incorporate nonlogical thought processes. He cannot say, as Scott and Denney (1896) did, that nonlogical thought is an imperfection or inadequacy in the conceptual behavior of the composer; nor can he say, as the tagmemicists do, that disorganized or incomprehensible thought is "unconventional." If he posits "one grand design" binding together discourse, composer/thinker, and universe, the nonlogical processes must fit into the design. He does not develop the heuristic potential of the nonlogical topics, however.

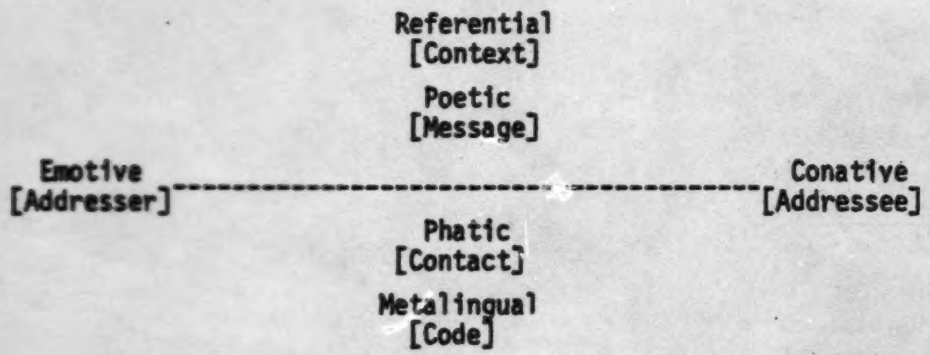
The weakness of D'Angelo's text and consequently his theory is its failure to consider tests of substance as well as tests of structure. This failure becomes most apparent in his extended analysis of Bertrand Russell's introduction to his Autobiography (1980, pp. 81-86). Underlying the three things which have governed Russell's life is the unarguable rejection of religion. Because students are unfamiliar, for the most part, with deep moral convictions arising from a source other than religion, they derive a meaning from the passage that is virtually the opposite of the one Russell intends. Because of the prominent placement of his analysis of this passage, one is compelled to wonder whether D'Angelo has himself misread Russell's intent. In any case, a rhetorical theory which not only allows but encourages this misreading must at the very least be considered incomplete.

## Evaluating Heuristic Models

Heuristic research, in general, looks at the composing process as "problem solving," but the particular theories specify in large measure the nature of the problem in need of solution. It is a major contention of this study that the application of a metatheory (such as that proposed by Lauer, 1967 and 1980) has been hampered by more fundamental questions. There has been a recurrent failure

of critics and adaptors of theories for pedagogical purposes to understand the nature of the problems posed by theorists.

Winterowd (1975) suggests that Jakobson's model of the universe of discourse can serve as a heuristic for examining composition models since it provides the most complete statement available of the interactive elements in discourse. Jakobson's model is easily understandable. His schema proposes six factors as being essential to a discourse situation: 1) the addresser--the writer, speaker, composer; 2) addressee or audience; 3) context, which Winterowd declares is "virtually synonymous with the term referent, as used by other theorists" (p. 2); 4) the message itself; 5) a contact, which Jakobson describes as "a physical channel and psychological connection between the addresser and the addressee, enabling them to stay in communication" (1960, p. 353); and 6) a mutually comprehensible code. Winterowd identifies the Jakobsonian modes according to "purpose" in discourse:




And Winterowd asserts that "any act of composition must involve [the] six major factors" (p. 8).

The pedagogical theorist in framing a heuristic sets up the "unknown" at some point in the universe of discourse and directs the explorer to search that area. For example, the newspaper journalist, ideally, does not give advice or render judgments. The journalist's purpose is to discover and relate information, so the focus is wholly on the subject (referential discourse): who was involved? what happened? where did it happen? et cetera. The goal of the Pre-Writing pedagogy was to

enable students "to live more abundantly"; the purpose of discourse was to discover personal truths, so the focus was primarily on the addresser and secondarily on the subject (1964, p. 23). In the same way, a pedagogy that teaches persuasion focuses on the addressee, diminishing the emphasis on the truth.

A rough estimate of the scope of a theory can be determined by looking at the definition of purpose within the pedagogy. And a rhetorical theory with an epistemological intent must give the widest possible latitude to the definition of purpose. By the same token, a metatheorist with too limited a view of the universe of discourse will miss important epistemological distinctions. For example, when Burke places "truth" not in the writer, audience, or subject, but in the code, symbolic action, of the human animal, the repeated failure of critics and adaptors of his pentad to composition instruction to understand the nature of the problem he is posing has resulted in some very un-Burkean pedagogical applications. A theorist may choose to start at one point rather than another or to emphasize one aspect over another, but the metatheorist must take a view outside all of the theories and outside the universe of discourse as well.

If we accept the evaluation of empirically unverifiable theories as a possible task and if the theories chosen for evaluation are internally consistent, the only approach available to us is to compare counter-proposals that attempt to explain the same data and then to determine which of the theories explains the greatest amount of problematic data while doing the least violence to what is already known to be true about the composing process. If a theory is epistemologically sound, then the pedagogical implications should be explicit and consistent within the terms of the theory.

Some of the points of comparison are obvious enough: How does the theory deal with invention, arrangement, and style? Are they central or peripheral concerns? What is the nature of truth assumed by the theorist? And to what extent is adherence to truth a concern? What is the goal of the pedagogy assumed by the

theory? What assumptions about the writer are made? Even recognizing what the product of a particular pedagogy is designed to be can be a major improvement in determining the appropriateness of a particular heuristic technique in a particular rhetorical situation.

It is perhaps not possible within the space of a single study to do justice to any one of the theories examined. No doubt the author is guilty of serious errors of omission, perhaps of commission as well, but the primary goal--to discuss the theories as theories--is an essential and too long neglected enterprise in composition. The charts presented in the Appendix represent an attempt to provide capsule analyses of some of the major theories of composition on a number of salient points. What is presented is not a complete analysis, but it is a start.

## Appendix

| | Controlling Metaphor | Heuristic |
|---|---|---|
| Newspaper journalism | Impartial reporting | who? what? when? where? how? why? |
| Traditional composition | Simplified abstractions | Forms of discourse; lists of theme topics |
| Classical rhetoric | Good man speaking | special and common topics |
| Pre-Writing: Rohman and Wlecke | Analogy with organicity of plant + existential commitment | journal, meditation, analogy |
| Zoellner's behavioral pedagogy | stimulus-organism-response | talk-write; description; "skill" with preliminary questions |
| Burke's dramatism | Man as symbol-using, symbol-abusing animal driven by the principle of perfection | speculative etymology; pentad, ratios, circumference |
| Tagmemics | particle/wave/field | 9-cell model using particle/wave/field with contrast, variation and distribution |
| D'Angelo's conceptual theory | one grand design | logical topics: static, repetitive, iterative; and nonlogical topics |

| | Nature of Truth | Adherence to Truth |
|---|---|---|
| Newspaper journalism | Accurate information | Recognizes slanting as possible |
| Traditional composition | Undefined: unresolved conflict between romantic conception of personal truth and scientific fact | Empirically verifiable facts should not be misstated |
| Classical rhetoric | The matter of argument, fact | The true argument is the better one, but rhetoric can be abused |
| Pre-Writing: Rohman and Wlecke | Truth exists for the individual in action (personal commitment) | Truth not personally felt is unauthentic being; no goodness without authenticity |
| Zoellner's behavioral pedagogy | Inherent in the nature of the world | Accurate representation of truth, which must take into account psychological predisposition to fallacies |
| Burke's dramatism | Inherent in the nature of the world profoundly modified by symbolicity | Every terminology contains its own negation and perfection |
| Tagmemics | Probablistic; requires shifting persepctive to achieve greatest possible view of subject | Requires resolving dissonance in addresser or addressee's image of world (testing solutions to prior difficulties) |
| D'Angelo's conceptual theory | Intelligible structure is organic and holistic | Striving after intelligible structure; avoid fallacies |

| | Purpose of Discourse | Focus in Universe of Discourse |
|---|---|---|
| Newspaper journalism | To inform | Subject |
| Traditional composition | To inform, to picture, to please, to persuade | Subject/simplified concern for addressee/code as Correctness/addresser largely ignored |
| Classical rhetoric | To persuade | Subject/addressee/addresser/code |
| Pre-Writing: Rohman and Wlecke | To discover personal truth | Addresser first/subject second/addressee largely ignored/code last concern of pedagogy |
| Zoellner's behavioral pedagogy | To represent reality accurately | Subject first/code/addresser/addressee |
| Burke's dramatism | To bring about "identification" | Code first/addressee second/addresser through choice of circumference |
| Tagmemics | To solve problems: to reconstruct, modify, clarify, or reinforce image held | Subject/addressee (hostility reduction)/addresser (determining image)/code |
| D'Angelo's conceptual theory | To discover underlying structure | Code first, organizational level/subject as structure/traditional composition concern for addressee |

| | Goal of Pedagogy | Product |
|---|---|---|
| Newspaper journalism | To produce professional reports of information without bias | News story (informative report) |
| Traditional composition | To write "well" and correctly | Freshman essay: description, narration, exposition, persuasion (often as 5-paragraph theme) |
| Classical rhetoric | To influence public to right action; to defend or condemn someone's action; to praise or blame someone's action | Deliberative speech; forensic speech; ceremonial speech |
| Pre-Writing: Rohman and Wlecke | To live more abundantly | Personal journals; compositions using analogies of place; compositions using more abstract analogies |
| Zoellner's behavioral pedagogy | To increase scribal fluency | Freshman essays: description, narration, exposition, argumentation |
| Burke's dramatism | Fillion: to understand and appreciate the part symbolicity plays in all human relationships | Arguments and analyses focusing on terminological implications within a subject |
| Tagmemics | To state and solve problems | Conventional essay forms: description, narration, exposition tracing process of inquiry; 5-paragraph theme; classical argument; Rogerian argument |
| D'Angelo's conceptual theory | To discover structure inherent in all discourse situations and in nature; + traditional composition goals | Essays displaying structures specified by logical topics; syllogistic arguments |

| | Assumptions about Writer | Role of Invention |
|---|---|---|
| Newspaper journalism | Mature professional | To make certain no facts are ignored in story |
| Traditional composition | Unskilled student | To react to the theme assignment |
| Classical rhetoric | Educated, intelligent, moral, complete human sympathy ("good man speaking") | To discover arguments that will persuade public or judge to right action |
| Pre-Writing: Rohman and Wlecke | Beginning writers or those who have trouble expressing themselves | To discover existential relationship between writer and subject |
| Zoellner's behavioral pedagogy | Beginning writers or those who lack scribal fluency | To facilitate or activate fluency |
| Burke's dramatism | Symbol-using, symbol-abusing animal | To discover terminological implications |
| Tagmemics | Student-writer capable of making choices | To retrieve relevant information; to draw attention to relevant information; to prepare the mind for discovery of ordering principle |
| D'Angelo's conceptual theory | Freshman students: "knowledgeable, socially responsible, and sensitive to the needs of . . . readers" | To help discover relationships between subject/addresser/addressee; to give order to experience; to discover one's own thoughts and feelings |

| | Arrangement | Style |
|---|---|---|
| Newspaper journalism | Facts presented in descending order of importance so that least important details can be lopped off without disturbing the whole | Succinct, unadorned; standards of correctness established by the profession as mandated by traditional composition |
| Traditional composition | 5-paragraph theme; beginning-middle-end; patterns of paragraph development | Correctness; prescriptive, often out-dated standards of usage |
| Classical rhetoric | Aristotle: statement of the case and proof; later solidified into six invariant parts | Aristotle: style and delivery should not offend or distract; later rhetoric reduced to discussions of style |
| Pre-Writing: Rohman and Wlecke | Structure is organic: journals = stream of consciousness; composition of place = dramatic scene; abstract analogies may suggest but not determine arrangement | Concern with correctness and syntactic style delayed indefinitely |
| Zoellner's behavioral pedagogy | "Orderliness" as one of fundamental skills; parts of discourse may be arranged according to principles of coordination, subordination, and modification of relationships inherent in subject | Skillful emphasis at all levels of discourse of relationships inherent in the subject is acquired with practice, reinforcement of intermediate attainment of goal (style = shaped behavior) |
| Burke's dramatism | Counter-Statement: three forms underlie all discourse--static, progressive, and iterative; later progressive, repetitive, and conventional | Persuasion (suadere) is a "sweet utterance"; not a central concern |
| Tagmemics | Conventional forms: ambiguous about whether possible forms are hierarchically related to constants of conceptual behavior | Ability to see and solve problems (efficiency and effectiveness as criteria) |
| D'Angelo's conceptual theory | Relationships inherent in nature of universe can be exploited for organizational purposes | Semantic and syntactic choices; improvement through imitation (vicarious participation in one grand design) |

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